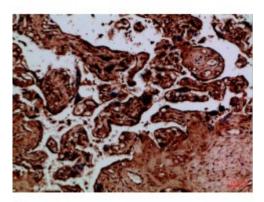


Anti-NAIP antibody





Description Rabbit polyclonal to NAIP.

Model STJ99015

Host Rabbit

Reactivity Human, Mouse

Applications ELISA, WB

Immunogen Synthetic peptide from human NAIP protein.

Immunogen Region 1191-1240 aa

Gene ID <u>4671</u>

Gene Symbol NAIP

Dilution range WB 1:500-2000ELISA 1:10000-20000

Specificity The antibody detects endogenous NAIP.

Tissue Specificity Expressed in motor neurons, but not in sensory neurons. Found in liver and

placenta, and to a lesser extent in spinal cord.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Baculoviral IAP repeat-containing protein 1 Neuronal apoptosis inhibitory

protein

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:7634OMIM:600355</u>

Alternative Names Baculoviral IAP repeat-containing protein 1 Neuronal apoptosis inhibitory

protein

Function Anti-apoptotic protein which acts by inhibiting the activities of CASP3,

CASP7 and CASP9. Can inhibit the autocleavage of pro-CASP9 and cleavage of pro-CASP3 by CASP9. Capable of inhibiting CASP9 autoproteolysis at 'Asp-315' and decreasing the rate of auto proteolysis at 'Asp-330'. Acts as a mediator of neuronal survival in pathological conditions. Prevents motorneuron apoptosis induced by a variety of signals. Possible role in the prevention of spinal muscular atrophy that seems to be caused by

inappropriate persistence of motor-neuron apoptosis: mutated or deleted forms of NAIP have been found in individuals with severe spinal muscular atrophy.; Acts as a sensor component of the NLRC4 inflammasome that specifically

recognizes and binds needle protein CprI from pathogenic bacteria

C.violaceum. Association of pathogenic bacteria proteins drives in turn drive assembly and activation of the NLRC4 inflammasome, promoting caspase-1 activation, cytokine production and macrophage pyroptosis. The NLRC4 inflammasome is activated as part of the innate immune response to a range of

intracellular bacteria such as C.violaceum and L.pneumophila.

Sequence and Domain Family Both the BIR and NACHT domains are essential for effective inhibition of

pro-CASP9 cleavage. BIR3 domain binds to procaspase-9 and the NACHT domain interacts with the NACHT domain of APAF1 forming a bridge

between pro-CASP9 and APAF1.

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